Freeform Search

Database: US Pre-Grant Publication Full-Text Database; US Patents Full-Text Database; US OCR Full-Text Database; EPO Abstracts Database; JPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Term: L9 and (peptide or pladmid)

Display: 20 **Documents in Display Format:** - **Starting with Number** 1

Generate: ○ Hit List ◉ Hit Count ○ Side by Side ○ Image

Search Clear Interrupt

Search History

DATE: Thursday, January 15, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ			
L10	L9 and (peptide or pladmid)	16	L10
L9	l3 and L8	116	L9
L8	(polyacrylic or polyalkenyl or divinyl or Noveon or carbomer or Eudragit)	100813	L8
L7	L6	1	L7
L6	l2 and l3	1	L6
L5	l1 and l2 and l3	0	L5
L4	(wax adj layer)	2622	L4
L3	wax adj layer$	2628	L3
L2	(424/433).ccls.	301	L2
L1	(424/435).ccls.	630	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Term	Documents
DERMAL	17587
DERMALS	1
(16 AND DERMAL).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	3
(L16 AND DERMAL).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	3

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L19

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Thursday, January 15, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ			
L19	l16 and dermal	3	L19
L18	Ll16 and film	5	L18
L17	l7 and mucosal	5	L17
L16	L15 and adhesion	688	L16
L15	l7 and film	1717	L15
L14	l7 and mucoadhesive	4	L14
L13	l7 and (mucoadhesive adj layer)	4	L13
L12	l1 and l7	0	L12
L11	l5 and (wax adj2 layers)	0	L11
L10	l5 and (wax adj1 layer)	0	L10
L9	l5 and L7	0	L9

A *gel solution* is defined as a gel which has a molecule of interest dissolved in solution in the liquid phase. A *gel suspension* is defined as a gel which has a molecule of interest suspended in the liquid phase.

A *wax* refers to any water-insoluble substance composed of hydrocarbons, alcohols, fatty acids, and esters that are solids at temperatures below 40°C, but liquids at temperatures of above 40°C. Suitable waxes are, but not limited to the following, DENTSPLY® Utility Wax, beeswax, emulsifying wax, microcrystalline wax, carnauba wax, paraffin wax, white wax, yellow wax, or other suitable pharmaceutical wax. It is preferred that the wax has a melting temperature between 40°C and 100°C, more preferred that the wax has a melting temperature between 40°C and 80°C, and most preferred that the wax has a melting temperature between 40 °C and 65 °C.

A *wax-film composite* refers to a bi-layer film comprised of a pH-sensitive mucoadhesive layer and a water-insoluble wax layer. A molecule of interest may be loaded in and released from either the said pH-sensitive mucoadhesive layer or said water-insoluble wax layer. It is preferred that the molecule of interest is present in the wax-film composite at a concentration of 0.001% to 20% by weight, more preferably at a concentration of 0.001% to 10% by weight, and most preferably at a concentration of 0.001% to 5% by weight. It is preferred that the pH-sensitive mucoadhesive layer is present at a concentration in the wax-film composite of 20% to 90% by weight, more preferably at 30% to 80% by weight, and most preferably at 40% to 70% by weight. Preferably, the water-insoluble wax layer is present at a concentration in the wax-film composite of 10% to 80% by weight, more preferably at 20% to 70% by weight, and most preferably at 30% to 60% by weight. For bonding the two layers of the bi-layer wax-film composite, it is preferred that the water-insoluble wax layer contain at least one water-soluble or water-swellable agents such as, but not limited to, tragacanth, polyvinyl pyrrolidone, polyvinyl alcohol, cross-linked polyacrylic acid, polyethylene glycol, a cellulose-based polymer or derivative thereof, a cross-linked polyacrylic acid polymer or derivative thereof, or other suitable pharmaceutical polymers that are water-soluble or water-swellable. Preferably, the water-soluble or water-swellable agents are present in the wax layer at a concentration of 0.05% to 10% by weight, more preferably at 1% to 8% by weight, and most preferably at 1% to 5% by weight. It is envisioned that the wax-film composite may be applied to any readily accessible topical site including, but not limited to the following; any skin surface, rectal, vaginal, nasal cavity, any location in the mouth, or other accessible topical or mucosal surfaces. A dry wax-film composite will readily adhere to the surfaces described when the surfaces are wet with saliva or other bodily fluids. However, for application to dry skin, it is envisioned that the dry wax-film composite could be easily wetted using tap water or another appropriate vehicle to

L8	l5 and L7	0	L8
L7	wax adj2 layer	3808	L7
L6	wax adj1 layer$	2628	L6
L5	l1 and L4	245	L5
L4	(424/435).ccls.	630	L4
L3	(424/435).ccls	0	L3
L2	L1 and (424/435).ccls	0	L2
L1	(424/434).ccls.	606	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Term	Documents
PROTEIN	321178
PROTEINS	202491
PEPTIDE	132426
PEPTIDES	93545
PLASMID	69977
PLASMIDS	46270
(7 AND (PLASMID OR PEPTIDE OR PROTEIN)).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	230
(L7 AND (PROTEIN OR PEPTIDE OR PLASMID)).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	230

Database: US Pre-Grant Publication Full-Text Database; US Patents Full-Text Database; US OCR Full-Text Database; EPO Abstracts Database; JPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: L29

Refine Search | Recall Text | Clear | Interrupt

Search History

DATE: Thursday, January 15, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ			
L29	l7 and (protein or peptide or plasmid)	230	L29
L28	l26 and wax	82	L28
L27	L26 and (wax adj layer)	2	L27
L26	L24 and (peptide or protein)	311	L26
L25	l6 and l7 and L24	2	L25

L24	transmucosal adj delivery	460	L24
L23	(wax-film)	5	L23
L22	(wax-film adj composit)	0	L22
L21	l5 and l6 and l7	0	L21
L20	l5 and (wax adj layer$)	0	L20
L19	l16 and dermal	3	L19
L18	Ll16 and film	5	L18
L17	l7 and mucosal	5	L17
L16	L15 and adhesion	688	L16
L15	l7 and film	1717	L15
L14	l7 and mucoadhesive	4	L14
L13	l7 and (mucoadhesive adj layer)	4	L13
L12	l1 and l7	0	L12
L11	l5 and (wax adj2 layers)	0	L11
L10	l5 and (wax adj1 layer)	0	L10
L9	l5 and L7	0	L9
L8	l5 and L7	0	L8
L7	wax adj2 layer	3808	L7
L6	wax adj1 layer$	2628	L6
L5	l1 and L4	245	L5
L4	(424/435).ccls.	630	L4
L3	(424/435).ccls	0	L3
L2	L1 and (424/435).ccls	0	L2
L1	(424/434).ccls.	606	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Term	Documents
MUCOADHESIVE	608
MUCOADHESIVES	90
(MUCOADHESIVE AND 1).PGPB,USPT,USOC,EPAB,JPAB.	3
(L1 AND MUCOADHESIVE).PGPB,USPT,USOC,EPAB,JPAB.	3

Database: US Pre-Grant Publication Full-Text Database; US Patents Full-Text Database; US OCR Full-Text Database; EPO Abstracts Database; JPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: L5

Refine Search | Recall Text | Clear | Interrupt

Search History

DATE: Thursday, January 15, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB; PLUR=YES; OP=ADJ			
L5	L1 and mucoadhesive	3	L5
L4	L1 and (mucoadhesive layer)	3	L4
L3	L1 and L2	3	L3
L2	mucoadhesive adj2 layer	38	L2
L1	wax adj2 layer	2970	L1

END OF SEARCH HISTORY

A

L1 + 424/434/.

L1 + 424/435

B (polym) adj2 layer

L

L6: Entry 8 of 9 File: USPT Feb 8, 2000

DOCUMENT-IDENTIFIER: US 6022562 A
TITLE: Medicinal and/or nutritional microcapsules for oral administration

Brief Summary Text (12):
These film-coated monolithic systems have limited possibilities of use for various reasons. Firstly, in these systems, the dose of medicinal product is provided as a single physical entity, which presents the risk of release of a large amount of AP, either by chewing when it is taken or by breaking of the film coating during gastrointestinal transit, thereby disrupting their therapeutic effectiveness and presenting risks of serious side effects. Furthermore, taking their large size into account, these systems can only leave the stomach when the pylorus is open. Now, opening of the pylorus occurs sequentially and as a function of feeding. Consequently, the residence time of monolithic systems in the stomach varies enormously as a function of the time, the volume and the nature of meals, and also varies from person to person. These systems thus have a wide variability of absorption, or even of bioavailability, depending on the individual and the time at which they are taken. Moreover, their residence time in the small intestine is subject to natural transit, and these forms rapidly end up in the colon, where their release is completed. However, absorption by the colon is poor for a large number of APs. In addition, it is very irregular, given the high viscosity of the medium, the low surface area of the colon mucosa and the wide variability in transit time at this level. Thus, it is well known for these systems, that the sustained-release is not synonymous with a sustained-absorption, beyond natural transit time in the small intestine.

Brief Summary Text (29):
Thus, patent EP 0,452,268 claims a bucco-adhesive system in the form of microparticles film-coated with a gel of xanthan/carob gums or with ethylcellulose. The effectiveness of such a system, essentially intended for the mouth, is not established, and all the less so since the particles are coated with a film of wax as an outer layer, which is intended to sustain their release but which makes adhesion improbable, and anyway not demonstrated in vivo.

Refine Search

Search Results -

Term	Documents
PLASMID	60244
PLASMIDS	43919
(5 AND PLASMID).PGPB,USPT,USOC,EPAB,JPAB.	1
(L5 AND PLASMID).PGPB,USPT,USOC,EPAB,JPAB.	1

Database: US Pre-Grant Publication Full-Text Database; US Patents Full-Text Database; US OCR Full-Text Database; EPO Abstracts Database; JPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: L9

Refine Search | Recall Text | Clear | Interrupt

Search History

DATE: Thursday, January 15, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB; PLUR=YES; OP=ADJ			
L9	L5 and plasmid	1	L9
L8	L5 and (wax-film)	0	L8
L7	L5 and (wax-film adj composit)	0	L7
L6	L5 and (lidocaine or benzocaine or dyclonine)	3	L6
L5	L3 and peptide	78	L5
L4	L3 and mucoadhesive	4	L4
L3	L2 and wax	586	L3
L2	Aerosil 200	2157	L2
L1	Parafilm(TM)	6	L1

END OF SEARCH HISTORY

L15	l14 and bilayer$	39	L15
L14	l8 and mucoadhesive	338	L14
L13	l3 and transmucosal	2	L13
L12	l2 and l3	1	L12
L11	l1 and l3	0	L11
L10	L9 and (peptide or pladmid)	16	L10
L9	l3 and L8	116	L9
L8	(polyacrylic or polyalkenyl or divinyl or Noveon or carbomer or Eudragit)	100813	L8
L7	L6	1	L7
L6	l2 and l3	1	L6
L5	l1 and l2 and l3	0	L5
L4	(wax adj layer)	2622	L4
L3	wax adj layer$	2628	L3
L2	(424/433).ccls.	301	L2
L1	(424/435).ccls.	630	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Term	Documents
BILAYER$	0
BILAYER	14655
BILAYERBARRIER	1
BILAYERD	3
BILAYEREA	1
BILAYERED	989
BILAYERED-CAPACITOR	1
BILAYERED-COMPRESSED	2
BILAYERED-CORE	3
BILAYERED-LOTION	1
BILAYERED-MEMBRANE	1
(L14 AND BILAYER$).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	39

There are more results than shown above. Click here to view the entire set.

Database: US Pre-Grant Publication Full-Text Database; US Patents Full-Text Database; US OCR Full-Text Database; EPO Abstracts Database; JPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: L15

Refine Search | Recall Text | Clear | Interrupt

Search History

DATE: Thursday, January 15, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ		

L15: Entry 31 of 39 File: USPT Sep 21, 1999

DOCUMENT-IDENTIFIER: US 5955502 A
**** See image for Certificate of Correction ****
TITLE: Use of fatty acid esters as bioadhesive substances

Brief Summary Text (3):
During the last decade increased attention has been given to the possibility of using bioadhesive/mucoadhesive polymers for drug delivery purposes. It is believed that several problems associated with conventional controlled release drug delivery systems may be reduced or eliminated by using a bioadhesive/mucoadhesive drug delivery system.

Brief Summary Text (12):
Bioadhesive substances (also denoted mucoadhesive substances) are generally known to be materials that are capable of being bound to a biological membrane and retained on that membrane for an extended period of time. Bioadhesive drug delivery systems have been the subject of a number of patent applications (see e.g. EP-A-0 516 141, WO 93/21906, and EP-A-0 581 581) but to the best of our knowledge only polymers have been regarded as bioadhesive substances. Such polymers include, e.g., acrylic acid homopolymers and copolymers, hydrophilic vinyl polymers, hydrophilic cellulose derivatives, and natural polymers.

Detailed Description Text (4):
In the present context the term "a bioadhesive substance" is broadly defined as a material that is capable of being bound to a biological membrane, and retained on that membrane for an extended period of time. Accordingly, "bioadhesion" is the attachment of a material to a biological substrate such as a biological membrane. The term "a mucoadhesive substance" is in accordance with the generally accepted terminology used synonymously with the term "a bioadhesive substance". The term "mucoadhesive" underlines the fact that the adhesive bonding may be established between a material and the mucosa/mucus/mucin of a biological membrane.

Detailed Description Text (32):
Fluid crystalline phases may be a cubic (three cubic phases are known: i) the body-centered lattice, ii) the primitive diamond lattice, and iii) the gyroid), hexagonal, reverse hexagonal or lamellar phase. By the term "cubic phase" herein is meant a thermodynamically stable, viscous and optically isotropic phase made of a fatty acid ester and an aqueous medium. The terms "hexagonal phase" and "reverse hexagonal phase", respectively, are used herein to describe thermodynamically stable, viscous and optically anisotropic phases characterized by long-range order in two dimensions and made of a fatty acid ester and an aqueous medium. By the term "lamellar phase" is characterised by a long-range order in one dimension. The lamellar structure is the origin of liposomes having spherical shells of lipid bilayers. The various fluid crystalline phases can be detected and identified by use of polarized light or by means of X-ray diffraction pattern analysis (see the Examples herein).

Detailed Description Text (132):
In those cases where the bioadhesive composition is in the form of a multiple unit composition, the individual units or a tablet or a capsule containing the individual units may be coated e.g. with a sugar coating, a film coating (e.g.

based on hydroxypropyl methylcellulose, methylcellulose, methyl hydroxyethylcellulose, hydroxypropylcellulose, carboxymethylcellulose, acrylate copolymers (Eudragit), polyethylene glycols and/or polyvinylpyrrolidone) or an enteric coating (e.g. based on methacrylic acid copolymer (Eudragit), cellulose acetate phthalate, hydroxypropyl methylcellulose phthalate, hydroxypropyl methylcellulose acetate succinate, polyvinyl acetate phthalate, shellac and/or ethylcellulose). Furthermore, a time delay material such as, e.g., glyceryl monostearate or glyceryl distearate may be employed.

Detailed Description Text (213):
The test system for bioadhesion described in the following is a modified system of a method described by Tobyn, M., J. Johnson & S. Gibson (in "Use of a TA.XT2 Texture Analyser in Mucoadhesive Research", International LABMATE, 1992, XVII (issue VI), 35-38).

Detailed Description Text (227):
The peak detachment force and the area under the force/time curve was calculated automatically using the XT-RA dimension software. The work of adhesion (mJ cm.sup.-2), said to be the most accurate predictor of mucoadhesive performance, was calculated.

Detailed Description Text (251):
Polycarbophil (Noveon.TM. AA-1, B F Goodrich, Hounslow, U.K.) is a high molecular weight poly(acrylic acid)copolymer loosely cross-linked with divinyl glycol. On account of its known excellent mucoadhesive properties, this polymer serves as a reference. Before testing in the above-mentioned tensiometric test, a polycarbophil gel is prepared by mixing polycarbophil with water or methanol (resulting concentration about 10-20 mg ml.sup.-1) and the mixture is allowed to hydrate at room temperature for 24 hours. The polymer solution is periodically stirred. The resulting gel is applied on a cover glass and tested as described above and the result obtained is used as a reference value for excellent bioadhesive substances.

L15: Entry 29 of 39 File: USPT Oct 31, 2000

DOCUMENT-IDENTIFIER: US 6139861 A
TITLE: Intraoral topical anti-inflammatory treatment for relief of migraine, tension-type headache, post-traumatic headache facial pain, and cervical-muscle spasm

Detailed Description Text (9):
Several other transmucosal therapeutic systems have been developed to study enhanced/controlled delivery of drugs through the oral mucosa over a prolonged period of time. These systems are usually bilayers consisting of fast-release and sustained release layers.

Detailed Description Text (12):
Another type of mucoadhesive patch for transmucosal delivery of pharmacological agents is one prepared from Carbopol 974P and silicone polymer.

Detailed Description Text (16):
Mucoadhesive erodible tablets can also be used and are prepared using different bioadhesive polymers along with excipients like mannitol and PEG-6000. Examples of such polymers are carbopol-934 and sodium-carboxymethylcellulose.

Detailed Description Text (17):
Another composition for an erodible mucoadhesive tablet is formulated with polyacrylic acid, and hydroxymethylcellulose. The adhesive quality is determined by the concentration of the polyacrylic acid; the greater the concentration of the polyacrylic acid the greater the adhesive force. Pharmacological agents are added to the bioadhesive tablet by directly compressing with the polymers.

Hit List

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 20020142042 A1

Using default format because multiple data bases are involved.

L5: Entry 1 of 3 File: PGPB Oct 3, 2002

PGPUB-DOCUMENT-NUMBER: 20020142042
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020142042 A1

TITLE: pH-sensitive mucoadhesive film-forming gels and wax-film composites suitable for topical and mucosal delivery of molecules

PUBLICATION-DATE: October 3, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Mumper, Russell	Lexington	KY	US	
Jay, Michael	Lexington	KY	US	

US-CL-CURRENT: 424/487

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 2. Document ID: US 20020132008 A1

L5: Entry 2 of 3 File: PGPB Sep 19, 2002

PGPUB-DOCUMENT-NUMBER: 20020132008
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020132008 A1

TITLE: pH-sensitive mucoadhesive film-forming gels and wax-film composites suitable for topical and mucosal delivery of molecules

PUBLICATION-DATE: September 19, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Mumper, Russell	Lexington	KY	US	
Jay, Michael	Lexington	KY	US	

US-CL-CURRENT: 424/487

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

3. Document ID: WO 2051382 A2

L5: Entry 3 of 3 File: EPAB Jul 4, 2002

PUB-NO: WO002051382A2
DOCUMENT-IDENTIFIER: WO 2051382 A2
TITLE: PH-SENSITIVE MUCOADHESIVE FILM-FORMING GELS AND WAX-FILM COMPOSITES SUITABLE FOR TOPICAL AND MUCOSAL DELIVERY OF MOLECULES

PUBN-DATE: July 4, 2002

INVENTOR-INFORMATION:

NAME	COUNTRY
MUMPER, RUSSELL	US
JAY, MICHAEL	US

INT-CL (IPC): A61 K 9/00; A61 K 9/06; A61 K 9/70

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Term	Documents
MUCOADHESIVE	608
MUCOADHESIVES	90
(MUCOADHESIVE AND 1).PGPB,USPT,USOC,EPAB,JPAB.	3
(L1 AND MUCOADHESIVE).PGPB,USPT,USOC,EPAB,JPAB.	3

Display Format: - Change Format

Previous Page Next Page Go to Doc#

First Hit
End of Result Set

Generate Collection | Print

L5: Entry 3 of 3 File: EPAB Jul 4, 2002

DOCUMENT-IDENTIFIER: WO 2051382 A2
TITLE: PH-SENSITIVE MUCOADHESIVE FILM-FORMING GELS AND WAX-FILM COMPOSITES SUITABLE FOR TOPICAL AND MUCOSAL DELIVERY OF MOLECULES

Abstract Text (1):
The present invention relates to pH-sensitive mucoadhesive film-forming gels and wax-film comosites suitable for topical and mucosal delivery of molecules of interest, namely active pharmaceuticals. The gels comprise a pharmaceutically acceptable pH-sensitive polymer that responds to a lowering of pH by precipitating into films when in contact with the skin or mucosal surface. The films also comprise an adhesive polymer that allows the film to remain in contact with the tissue for an extended period of time. The wax-film composites comprise a bi-layer film having both the said pH-sensitive mucoadhesive layer to promote strong adherence to the skin and mucosal surfaces as well as a specially bonded wax layer intended to extend the adherence of the film to tissues for a prolonged period of time. The invention also relates to the use of said pH-sensitive film-forming gels and wax-film copmosites to deliver mmolecules of interest, such as small molecules, peptides, proteins, and nucleic acids either locally to act at the site of administration or for the absorption of said molecules of interest across biological membranes into the systemic circulation.